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Rediscovery and lectotypification of *Drypetes porteri* (Putranjivaceae: Phyllanthoideae: Drypeteae), A narrow endemic and endangered species of the Western Ghats, India

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ड्राइपेटेस पोरटेरी का पुर्नः अन्वेशण एवं लेक्टोटाइपिफिकेशन (पुत्रानजिवेसी : फायलेन्थवायडी : ड्राइपेटी) भारत के पश्चिमी घाट में सीमित एवं संकटग्रस्त स्थानिक जाति

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सारांश

भारत के तमिलनाडु राज्य के दक्षिणी पश्चिमी घाट के मेघामलाई वन्यजीव अभयारण्य के स्थानीय इलाके से प्ररूप संग्रहण के पश्चात *ड्राइपेटस पोरटेरी* (गेंबल) पैक्स इटी. के. हॉफिन पून: अन्वेषित किये गये । लेक्टोटाइपिफिकेशन, फल आकृति विज्ञान संशोधन सहित संक्षिप्त विवरण एवं सहज अभिनिर्धारण के लिए रंगीन चित्र उपलब्ध करवाए गये ।

ABSTRACT

Drypetes porteri (Gamble) Pax & K. Hoffm. is rediscovered after type collection (121 years) from type locality from Megamalai Wildlife Sanctuary, southern Western Ghats, Tamil Nadu, India. Lectotypification, brief description amended with fruit morphology and colour photographs are provided here for easy identification.

Keywords: Drypetes, Endemic, Lectotype, Megamalai

INTRODUCTION

The genus *Drypetes* was established by Vahl (1807) and comprising of *c.* 220 species (Levin, 2013), belonging to the subfamily Phyllanthoideae under the tribe Drypeteae (Griseb.) Hurusaw. It is chiefly distributed in tropical and subtropical regions with the maximum concentration in the Neotropical regions. *Drypetes* is distinct by having 1 or 2-locular ovary, drupaceous fruit, presence of a disk in the flowers, and the pistillate sepals imbricate in bud

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and deciduous in the fruits (Webster, 1994; Forster, 1997). In India, the genus is represented by 27 species (Krishna & al. 2017). Among these, 10 species of *Drypetes* are reported from the Western Ghats and 5 taxa namely *D. confertiflora* (Hook.f.) Pax. & K. Hoffm., *D. malabarica* (Bedd.) Airy Shaw, *D. porteri* (Gamble) Pax. & K. Hoffm., *D. venusta* (Wight) Pax & K. Hoffm. and *D. wightii* (Hook.f.) Pax & K. Hoffm. are endemic to the Western Ghats. Of the five-endemic species, *D. confertifolia* (Hook.f.) Pax & K. Hoffm. is confined to northern Western Ghats, *D. venusta* (Wight) Pax & K. Hoffm. throughout the Western Ghats, and the remaining three species are restricted to southern Western Ghats.

Gamble (1901) described the species, *Hemecyclia porteri* based on collection of H.J. Porter, made in April 1897 from Warsanad (Varushanad) valley, at about 2,000 feet elevation. Presently, the Varushanad valley comes under Megamalai Wildlife Sanctuary in Theni district of Tamil Nadu. During the recent floristic assessment of Megamalai Wildlife Sanctuary, the authors came across one interesting *Drypetes* species, after critical studies with the help of regional floras, revisionary studies (Chakrabarty & Balakrishnan, 2012; Chakrabarty & al, 1997), comparing with type specimen and original protologue concluded that the collected *Drypetes* is *D. porteri* (Gamble) Pax & K. Hoffm., which is hitherto known only by its type collection. Therefore, the present collection is rediscovery after 121 years since H.J. Porter's collection in April 1897.

There are two original materials collected by Porter housed at K (K000246663, image! and K000246664, image!), of which sheet bearing the barcode K000246664 has been designated here as the lectotype as it matches well with the original protologue. The guidelines of Article 9.2 and Recommendations 9A, 9C and 9D of the Melbourne Code (McNeill & al. 2012) have been followed while designating the lectotype.

TAXONOMIC TREATMENT

Drypetes porteri (Gamble) Pax & Hoffm. in Engler & Prantl, Pflanzenr. 147, 15(Heft 81): 268. 1922; Chakrabarty & al. J. Econ. Taxon. Bot. 21(2):251–280. 1997; T. Chakrab. & N.P. Balakr. in N.P. Balakr. & al. Fl. India 23: 401. 2012; T. S. Nayar & al. Fl. Pl. Western Ghats 1:357. 2014. **Fig. 1.**

Hemicyclia porteri Gamble in Hooker's Icon. Pl. 28: t. 2701. 1901; Fl. Madras: 1300.1925.

Lectotype ("designated here"): INDIA, Tamil Nadu, Theni Distr. Warsanad (Varusanad) valley, 2,000 ft, Apr. 1987, *H.J. Porter s.n.* (K000246664, image!; isolectotype, K000246663, image!).

*Description***:** Trees, to 12 m high; branches terete, lenticellate, greyish; young branchlets pubescent later become glabrous. Leaves simple, alternate, elliptic-obovate, 5–8.5 × 2–4 cm, oblique at base, entire along margins, acuminate at apex, coriaceous, greenish; lateral veins 5–7, prominent; veinlets conspicuous, sometimes hairy domatia at lower surface; petioles 0.5–1 cm long, canaliculated above. Inflorescence axillary. Male flowers: 2–7 in leaf axils, often at fallen leaf axils, 5–7 cm long; pedicels 3–4 cm long, hairy. Calyx lobes 4, rotundate, pubescent, imbricate, outer side golden yellow, inner side ribbed. Corolla 0. Stamens 25, equal; filaments *c.* 0.5 cm long; anthers longitudinally dehiscing. Female flowers not seen. Drupes globose, 0.5–1.5 cm, green, turning brown on maturity, densely rufous brown hirsute; seeds 2.

Specimens examined: INDIA: TAMIL NADU: Megamalai Wildlife Sanctuary: Varsanadu valley, 09°36.773" N 077°25.572" E, 7.2.2018, *C. Murugan* and *S. Arumugam* 138597 (♂) (MH); Varsanadu valley, 09°36.767" N 077°25.624" E, 7.2.2018, *C. Murugan* and *S. Arumugam* 138598 (♀) (MH).

Notes: *Drypetes porteri* (Gamble) Pax & K. Hoffm. closely resembles *D. venusta* (Wight) Pax & K. Hoffm. but differs by the presence of numerous stamens. This narrowly endemic species has been already assessed as Endangered (EN B1+2c) (IUCN, 2017). During the recent exploration in the Wildlife Sanctuary, it is observed that this species is very common in the type locality, but confined only to this locality. Chakrabarty & al. (2012) reported its distribution in the Western Ghats of Tirunelveli district based on a collection (*K.M. Sebastine* 5813, CAL, MH) from Arankattumalai, Kakachi. However, after critical examination of specimens it is revealed as *Casearia rubescens* Dalzell (determined by C. Murugan & R. Gopalan on 23-09-2004) belonging to Flacourtiaceae.

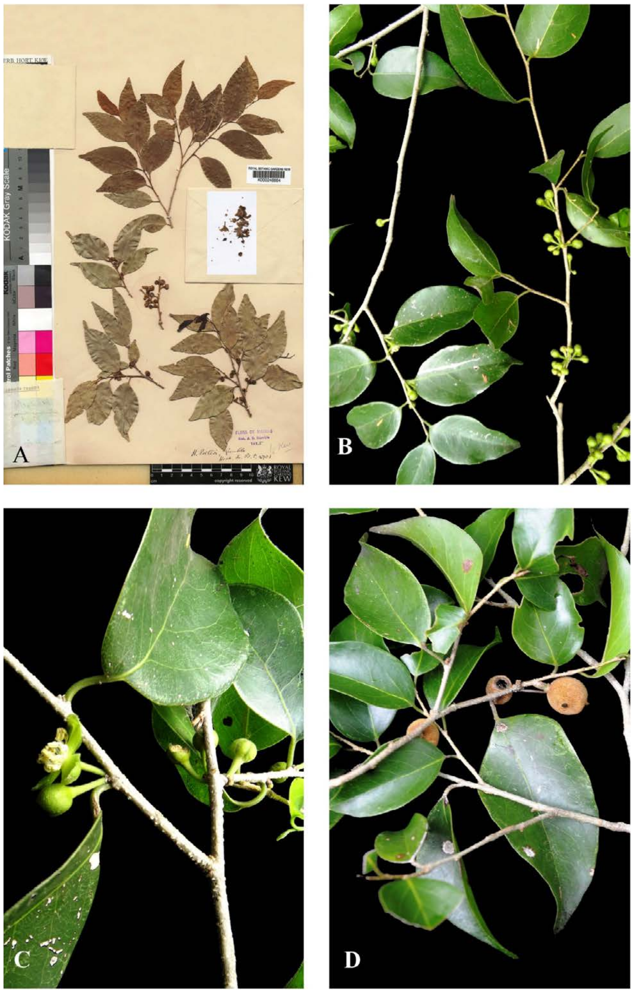

Fig. 1. *Drypetes porteri* **A.** lectotype **B.** Habit **C.** A twig with Male flower **D.** Fruiting twig

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